DOCUMENT RESUME

ED 194 923 CS 503 125

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TITLE The Perception of Nonverbal Behavior in Function of the Age and the Sex of the Rater.
PUB DATE Jul 80
NOTE 17p.: Paper presented at the Annual Meeting of the International Congress of Psychology (22nd, Leipzig, Germany, July 1980).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Age Differences: Attitudes: *Communication Research: Employment Interviews: *Evaluators: Higher Education: Nonverbal Communication: Paralinguistics: Personnel Evaluation: *Personnel Selection: *Sex Differences

ABSTRACT

Research was conducted on the age and sex differences in raters' evaluations of job applicants' nonverbal behaviors. A ten-minute videotape of five interviews was shown to 28 members (7 females and 21 males) of the Industrial Personnel Association who had varying years of experience in personnel work. The simulations depicted job applicants whose nonverbal behaviors varied in the following ways: constant gesticulation of hands: lack of eye contact: leaning over the table to the limit of territorial range and facing the interviewer directly most of the time (aggressive candidate): nervousness: and leaning slightly forward, establishing eye contact, and using moderate gesticulation (nonaggressive candidate). The age of the interviewer had a significant influence on general attitude toward hiring the applicant, but years of experience did not. Professional women were consistently harsher judges than the men. For whatever reasons (innate or learned), the female personnel officers consciously attributed more weight to nonverbal behavior than their male counterparts. While all the personnel managers preferred the more aggressive candidate to the nonaggressive candidate, this preference was very slight among the males and pronounced among the females. (RL)

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ED194923

XXIId International Congress of Psychology, University of Leipzig, DDR, July 1980

The perception of nonverbal behavior in function of the age and the sex of the rater

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My current research interest in nonverbal behavior centers on perception. The area where this could best be studied seemed to be the business interview. As the written resumé provides the necessary information on the applicant's background and skills, it is the specific function of the interview to probe his personality. Professional interviewers are aware of the fact that their judgements are to a considerable extent based on nonverbal cues. It is therefor possible to talk with them about the perception of nonverbal behavior knowledgeably and openly. In my research I was thus able to supplement tests and forced-choice questionnaires with open-ended inquiries.

The results from my multiple design approach concord in pointing to consistent differences depending on the sex, the age, and the background of the rater.

That any nonverbal message is not interpreted unanymously even within the same culture is clear considering that the receiver's perception of the sender's nonverbal behavior is determined by the following three factors.

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(1) The socio-cultural expectancies of the receiver which may or may not coincide with those of the sender, either

(a) basically, or

(b) partially.

(2) The definition the receiver has

(a) of the context and the situation in which the interaction takes place, and

(b) of the inter-personal relationship between himself and the sender, and between the sender and other interactants which may be present.

(3) The ego state of the receiver. The latter is dependent

(a) on his general health, external conditions (such as weather), and his biological rhythm; and

(b) on his mood which is an extension of a state previous to the present moment. The given mood may persist or change at some point during the novel experience of the interaction.

Experienced personnel workers are well aware of the influence of "the mood of the moment" and try to ask a co-worker to take over important interviews when they do not "feel in the proper condition to make an intelligent decision." Businesses also train their interviewers to recognize differences in behavioral styles and "mannerisms" of minorities and people from different social classes. Rating sheets increasingly contain rubrics for "Appearance: Grooming, posture, dress, manners, and neatness."

In addition to the above contingency factors of shared presuppositions, assessment of the situation, and mood, face-to-face interactions also involves attributive factors. The evaluation of nonverbal behavior is influenced by conscious and unconscious elements. The rater judges from

a base which combines his personality, his language-and-culture background, and his professional training. Nobody is fully cognizant of all his personality traits. An individual's cultural background too has conscious and unconscious elements. Even educational and professional training are not consistently on one's level of awareness. Personnel workers pride themselves in "being objective" and in their careful appraisal of a job applicant's behavior for which they say they follow learned rules. At the same time, the expression which came up in virtually every meeting I had with professional interviewers was "gut feeling". When asked to explain what they meant by "gut feeling", the definition most frequently was something like "native aptitude plus experience."

The following are the five attributive factors involved in the rating of nonverbal behavior.

(1) The kinesic-cultural background of the receiver. He may come

(a) from a high-kinesic culture; or

(b) from a low-kinesic culture.

People have a selective perception of body movements. Persons from high kinesic cultures see movements which persons from low kinesic cultures do not appear to notice (von Raffler-Engel et al 1978).

(2) Personality traits of the receiver. He may be

(a) a high self-monitoring individual, or

(b) a low self-monitoring individual.

According to Snyder (1980) high self-monitoring individuals carefully taylor their behavior to match the occasion while low self-monitoring individuals are less concerned about what impression they make on others. The former are also considerably more adept at seeing through deceptive appearances and able to detect insincerity. One of the purposes of the stress interview is to put the candidate off guard in order to reveal his

true self. Top professional interviewers distinguish between the real self, the self image (what the person thinks of himself), the projected images (the impression a person makes on others), and the attempted image (the impression he wants to make on others).

(3) The sex of the receiver:

(a) his own, male or female;

(b) and in relation to the sender, same-sex or other-sex.

(4) The age of the receiver,

(a) his own; and

(b) in relation to the age of the sender.

(5) The educational background and professional training of the receiver. They may influence his perception

(a) because of the general formative impact the latter excert on his judgement; or

(b) by reason of their specific relation to all or some of the interactants and to the message conveyed by the sender.

The evaluation by professionals and by college students of identical video taped interview situations showed significative differences in the interpretation of some movements even when the two groups agreed in the description of these movements (von Raffler-Engel et al 1980).

This paper will deal with the differences in evaluation depending on the age and on the sex of the raters.

Instrument. A videotape of the total duration of slightly more than ten minutes was prepared showing five clips depicting a business interview. The words spoken by the job applicant remained constant but his nonverbal behavior varied with each clip.

In frame I the applicant gesticulated almost constantly with his

hands while he talked. The movements were not inappropriate per se but too continuous without the usual pauses.

In frame II the applicant established eye contact with the interviewer only once, looking away from him most of the time.

In frame III the applicant leaned over the table to the limit of his territorial range, facing the interviewer directly most of the time. He used limited gesticulation.

In frame IV the applicant fidgeted nervously, used self-adaptors and played with the telephone cord.

In frame V the applicant leaned slightly forward, established eye contact, and used moderate gesticulation.

It was decided to have one and the same job applicant throughout the five frames to avoid interference from personality factors. On the other hand using an identical actor might produce the halo effect and seem less natural. It was a question of choosing the lesser of possible sources of interference beyond my control.

The five frames were kept to slightly under two minutes in duration each. There are three reasons for this time limit. One is that raters get bored with long tests and I wanted to minimize the chances that they might not be fully attentive when evaluating the last frames. The second reason is that personnel workers had told me consistently that they tend to make up their mind about an individual within the first one or two minutes and rarely change that first impression. The third reason is inherent in nonverbal behavior per se. Specific types of nonverbal behavior can not be isolated for emphasis and protracted beyond a short time least they risk looking like a nervous tic.

Subjects. The tape was shown to 37 members of the Nashville chapter of the Industrial Personnel Association during their monthly meeting,

October 2, 1979. After the test each rater was asked to mark the rating sheet with M or F for his sex with a number indicating his age, followed by a number indicating his years of experience in personnel. After elimination of incomplete questionnaires 28 subjects remained suitable for study yielding the following factorial design:

	Males	Females
total population:28	n.21	n.7
age range	24-64	24-57
mean age	39.2	37.5

Testing Procedure. All five video frames were shown to the raters in their numbered sequence and during a single session. After viewing each frame the raters had one minute to compile an identical forced-choice rating sheet consisting of six multiple choice questions. (See rating sheet in appendix).

Analysis. The answers to each question were added together separately for the males and the females. (See chart in appendix). The comparison was established through percentiles calculated with the equivalence of ratios. This was done by hand by my student Frank Gantz III. To see whether age and experience were significant variables Noel Jim performed a linear regression analysis by computer.

Results.

Age differences among interviewers.

The age of the interviewer had a significative influence on his general attitude towards hiring the applicant. As frames I and II were rated negatively on the whole, there was not much point in examining raters' responses on whether they would or would not hire the applicant. I concentrated on frames III, IV, and V. A linear regression was performed for the total population (See Appendix). As age increased so did the amount

of negative responses to question 1.

The general trend holds true for both sexes. The 7 professional women answered in the following manner:

Age of rater	No. that would hire	No. that would not hire
24	2	3
25	2	3
29	2	3
37	3	2
40	2	3
50	0	5
57	1	4

The potential for years of experience is obviously related to chronological age, but as people change jobs there is no absolute correlation between an interviewer's age and his years of experience in personnel. Experience was therefor included in the linear regression analysis. Years of experience proved not to be a significant variable. None of the people with whom I met personally was aware of this. Many people were, however, aware of the direct relation which obtains between age and severity of judgement. Some attributed it to "experience which makes people more observant" while one young woman put it more bluntly: "The older they get the meaner they become."

Interviewer's sex as a significant variable.

In the findings I am presenting in this paper and in all my previous research on the impact of the interviewer's sex on his judgment of the nonverbal behavior of an applicant, sex proved to be a significant variable. Professional women were consistently harsher judges than men.

My findings thus contradict all previous research. Boyle et al (1980) reports that Dipbove et al (1977) found that the sex of the interviewer had no influence on the rating of job candidates and that London and Poplawski (1974) found that women were more lenient in their ratings. The disparity of results can possibly be explained by two factors. One is that there

are clear-cut instances where everybody agrees on hiring or not-hiring a candidate while middle-of-the road candidates seem to be judged more harshly by women than men. The other is that in addition to overall evaluations, my research investigates the reaction to a set of specific types of nonverbal behavior.

When comparing the yes/no replies by the 21 men and the 7 women to the question of whether an applicant should be hired (see chart in Appendix) once the equivalence of ratios is established the following result is obtained:

M	yes	41	F	yes	36
M	no	64	F	no	75

This shows that the women are approximately 15% more critical of the candidate than the men.

Looking at specific types of nonverbal behavior the following differences according to the sex of the rater were detected. When rating frame IV depicting the fidgeting candidate, among the professional women 85% felt that the candidate was not emotionally stable, while among the men only 50% judged in this manner. On the overall, however, the women were not significantly different from their male counterparts when it came to deciding whether or not to hire the applicant. The female ratings were only slightly more negative. Frame IV Question 1 produced the following results adjusted to the equivalence of ratios:

Hire	Not Hire
M 4	M 17
F 3	F 18

That women are more irritated than men by a fidgeting candidate was also confimed by a survey questionnaire my student Elizabeth B. Battey administered to campus recruiters from industry at the Vanderbilt University Career and Placement Office. Pearson's multiple correlation test showed

that sex was significantly correlated to the nonverbal feature of fidgeting. I talked with several personnel executives about their attitude towards nervous fidgeting. The majority of the women told me that it makes them nervous and they could not personally work with such a person but others usually can. The men were less affected by fidgeting and said that a candidate, particularly when he is young and inexperienced, is apprehensive in the interview situation and would not hold it against him in the first interview. In a second interview they would consider such behavior in relation to the job requirements. An accountant in a back office would be judged differently from a salesman that has to inspire confidence. For men, thus, fidgeting was veiwed more in relation to an employee's public image than as an expression of his personality.

Boyle et al (1980) report a dissertation by Sterrett (1976) who found that "male managers reacted positively to 'excess body language,' whereas female managers reacted negatively." Boyle et al do not specify what Sterrett (whose dissertation I was not able to consult directly) distinguish clearly between hand gesticulation and fidgeting. It may simply indicate that women react negatively to fidgeting.

The difference between men and women judges is also apparent when comparing the results from frame III and frame V. These two frames were not ostensibly strongly dissimilar like all the other frames. In both frames basically the candidate did all the proper things, he did nothing blatantly wrong like in all the other frames. The two frames differ in the following manner: in frame V the candidate is animated while in frame III he is slightly aggressive, leaning forward on the desk.

While all the personnel manager preferred the more aggressive candidate, the preference is very slight among the males but it is pronounced among the females. The latter find him more intelligent and more com-

petent. Where the women differ most is on Question 3. The female raters--with the exception of one who systematically ranked both frames in the lowest manner possible--rated only the aggressive candidate as self-reliant considering the non aggressive candidate in frame V as insecure. The vast majority of male raters considered both candidates self-reliant. A few men considered both candidates insecure or overbearing.

The reason for women's more critical approach to the evaluation of nonverbal behavior could be either innate or learned. The two alternatives are as follows:

(1) All women are innately more powerfully equipped to understand nonverbal behavior because
   (a) they are more perceptive; or
   (b) they instinctively work harder at uncovering the real self of an interlocutor.

(2) Those women who choose business careers constitute a special group of women , viz.
   (a) they are tempermantally more captious; or
   (b) they simply are constantly on the alert to compete in what traditionally was a man's work.

When I mentioned to personnel executives that the statistical analysis of a forced-choice questionnaire showed that male and female interviewers agree in extreme situations but vary greatly in their evaluation of diverse nonverbal cues I received a great disparity of replies. Many men were genuinely surprised at the findings while all women said that they knew this all along. Most women asserted that they are "the stronger sex and innately more sensitive and more clever." A minority of women believed in the power theory of sex differences and considered it a learned response

albeit one that after so many generations of subordination could have become genetically conditioned. The men were about equally divided into those who believed that women are instinctively "more perceptive and more cunning" and those who feel that only women who are temperamentally high strung go into personnel work.

My own findings would concur with the latter opinion. A comparison of male and female student responses to the same tapes that were shown to the personnel professionals showed no appreciable difference along sex lines (von Raffler-Engel and Gantz in press) although there were differences when comparing the students and the professionals as a group. It does therefor seem that the type of woman who goes into management is temperamentally more captious than other women and professionally constantly aware of the fact that she must be extremely competitive in orientation. It would be important to perform a follow-up test with a large number of female students divided by their career goals to determine whether the women who plan to go into business react differently from those who have other career goals.

Whatever the reason, it is a fact that female personnel officers consciously attribute more weight to nonverbal behavior than their male counterparts. At the end of the survey questionnaire which Battey distributed to campus recruiters (see above), the respondents were asked to rate on a scale from 0 to 9 how much weight they placed on the nonverbal behaviors that had been listed above in comparison to an applicant's skills and background. The subjects were 5 women and 22 men and the mean weight for the women was 6.6 which for the men it was only 5.4. Most indicative was the fact that the women had not a single response in the lower ranks. The median, thus, indicates even more strongly that women recruiters admittedly give more importance to nonverbal behavior than men.

Given the disparity in numbers between males and females any comparison between the sexes can only be considered indicative rather than conclusive. The results, nevertheless, are significant because they are extremely consistent. My findings also raise a vital issue concerning the severity of judgment associated with women in the context of nonverbal behavior. When confronted with written and strictly verbal information, London and Poplawski (1976) found that "In general, ratings by females were higher than ratings by males" (204).

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RATING SHEET

Answer all the questions (1-6) from top to bottom on each column. Each column corresponds to a segment on the videotape.

1. a) Would you hire the applicant? Yes No b) If yes, would you hire the applicant a) enthusiastically c) without reservations c) with reservations

2. The applicant's intellectual capacity is a) outstanding b)average c)below average

3. The applicant appears: a) self reliant b) insecure c) overbearing

4. Does the applicant appear emotionally stable? Yes No

5. Does the applicant appear: a) highly competent b)adequately competent c) incompetent

6. Outside of any professional consideration I would like to have the applicant as: a) a personal friend b) an acquaintance c) my boss d) my employee e) never have anything to do with him.

ANSWER SHEET

1)	I.a.___ b.___	II.a.___ b.___	III.a.___ b.___	IV.a.___ b.___	V.a.___ b.___
2)	I._____	II._____	III._____	IV._____	V._____
3)	I._____	II._____	III._____	IV._____	V._____
4)	I._____	II._____	III._____	IV._____	V._____
5)	I._____	II._____	III._____	IV._____	V._____
6)	I._____	II._____	III._____	IV._____	V._____

MALES (Professionals) N-21 Age Range=24-65 ($\bar{X}$=39.2)

	I	II	III	IV	V
1a)	2 yes 19 no	3 yes 18 no	16 yes 5 no	4 yes 17 no	16 yes 5 no
b)	1a 1c	1b 2c	2a 8b 6c	4c	2a 8b 6c
2)	5a 13b 3c	4a 15b 2c	9a 11b 1c	3a 14b 4c	7a 13b 1c
3)	6a 15c	1a 17b 3c	17a 2b 2c	2a 17b 2c	16a 1b 4c
4)	10 yes 1ine	9 yes 1ine*	18 yes 3 no	10 yes 10 no*	18 yes 3 no
5)	4a 13b 4c	1a 14b 6c	6a 14b 1c	1a 10b 10c	7a 13b 1c
6)	2b 2d 17e	1a 7b 2d 11e	3a 3b 12d 3e	9b 1d 11e	3a 4b 1c 8d 5e

*One applicant answered "yes/no". His response is not included.

FEMALES (Professionals) N=7 Age Range=24-57 ($\bar{X}$=37.5)

	I	II	III	IV	V
1a)	7 no	7no	6 yes 1 no	1 yes 6 no	5 yes 2 no
b)	-----	-----	5b 1c	1b	2b 3c
2)	7b	5b 2c	3a 3b 1c	7b	6b 1c
3)	7c	6b 1c	6a 1c	1a 6b	6b 1c
4)	5 yes 2 no	4 yes 3 no	6 yes 1 no	1 yes 6 no	6 yes 1 no
5)	7b	3b 4c	3a 3b 1c	4b 3c	6b 1c
6)	1b 1c 5e	1b 1c 5e	1b 1c 5d	1b 1c 2d 3e	1c 5d 1e

AGE AND YEARS OF EXPERIENCE OF PROFESSIONAL RATERS

Linear regression analysis of question (hire/not hire) frames III, IV, and V

Using Ordinary Least Squares (OLS), the following regressions were run:

iii) $H3 = a0 + a1\ AGE + a2\ EXP + e3$
iv) $H4 = b0 + b1\ AGE + b2\ EXP + e4$
v) $H5 = c0 + c1\ AGE + c2\ EXP + e5$

where a0, b0, c0 = constant terms
ai, bi, ci = coefficients (i = 1, 2)
ej = error terms (J = 3, 4, 5)
Hj = percent of hirers within each age bracket
AGE = midpoint age of age bracket. Brackets used were 24-25, 26-29, 30-33, 34-39, 40-43, 44-49, 50-60,60 + years of age. Subdivisions were dictated more by the availability of data than considerations of a priori theory.

Thus, Hj are the dependent variables assumed to be linearly dependent on AGE and EXPERIENCE.
The results are reported as follows. T-statistics are in parentheses below each coefficient (T-statistics indicate the significance of the coefficients--coefficients significant at alpha - .05 are marked by a *, those at alpha = .01 by a **). R^2 shows the goodness of fit on the equation--the closer to 1.0, the better the fit. Note the exceptionally good R^2 for H3. SE (Standard Error of the regression) shows the dispersion of the regression coefficients.

iii) $H_3 = 135.220 - 1.411\ AGE + .089\ EXP$ $R^2 = .7911$
(5.578) (-1.442)** (.0556) SE = 11.469

iv) $H_4 = 57.5101 - 1.883\ AGE + 3.584\ EXP$ $R^2 = .2175$
(1.184) (-.936) (1.116) SE = 22.9754

v) $H_5 = 159.98 - 2.713\ AGE + 2.4756\ EXP$ $R^2 = .5793$
(3.949) (-1.66)* (.724) SE = 19.165

The results indicate that as interviewers grow older, the percentage of <u>not</u> hiring increases.
Experience apparently has no significant effect on the hire/not hire decision.
Analysis performed by Noel Lim.